

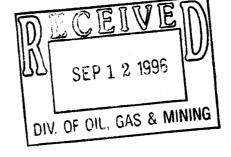
Michael O. Leavitt Governor Dianne R. Nielson, Ph.D. Executive Director Don A. Ostler, P.E. Director

## State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

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September 4, 1996



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**Executive Secretary** 

Elaine J. Dorward-King, Ph.D. Director, Environmental Affairs Kennecott Utah Copper Corporation 8315 West 3595 South P.O. Box 6001 Magna, Utah 84044-6001

Dear Ms. Dorward-King,

Subject:

Proposal to reclaim land with biosolids, Triangle Borrow Site

Your request for approval of Kennecott's proposal dated August 8, 1996, to apply biosolids at a rate that exceeds the annual agronomic application rate is hereby granted by the Executive Secretary of the Utah Water Quality Board, as the permitting authority under 40 CFR 503.14(d). The proposal calls for a one-time application for the Triangle Borrow Site of approximately 80 acres located in the SW ¼ of Section 16 and the SE ¼ of Section 17, Township 3 South, Range 2 West, Salt Lake County, Utah.

It is understood that the intended application rates are 15 to 30 dry tons per acre (dt/ac) or less, but approval is granted for up to 35 dt/ac in case of minor variations in application rate. The range of 15 - 30 dt/ac is based on preliminary results from earlier test plots that used a wider range of application rates. The application to the 1994 small waste rock test plots, and the application to the 30 acre waste rock sites have provided very encouraging data, in both soil chemistry and plant growth. However, we agree that it is still too early to assess long term, self-sustaining reclamation success.

This larger area of application will allow a better comparison of different application rates, which will assist in determining rates on other sites in the future. We understand that you agree with our position that large-scale application rates should not be above the rate at which no further improvement in reclamation is achieved by adding more. Therefore, it is recommended that the present project should compare three application rates, 15 dt/ac, 20-25 dt/ac and 30 dt/ac, so that it will show if 30 dt/ac offers a benefit over 20-25 dt/ac.



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The biosolids will be supplied by Central Valley Water Reclamation Facility (CVWRF) and possibly by South Valley Water Reclamation Facility (SVWRF). All requirements of 40 CFR 503, including the permit requirements of the biosolids generators must be met, including Class B pathogen treatment and corresponding management practices.

This approval does not release Kennecott from compliance with other State rules and programs or local authority. Kennecott must notify DWQ if the actual application rates are significantly different from those proposed, or if the 35 tons/acre limit is exceeded. Also, please provide three copies of any interim and final reports, assessing the effectiveness of the reclamation project and various application rates on this substrate.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E. Executive Secretary

DAO:LR/st

cc:

Bob Brobst, US EPA Region VIII

Lynn Kunzler, DOGM

Reed Fisher, Central Valley WRF John Callis, South Valley WRF

Melvin Muir, Salt Lake City/County Health Dept.

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